

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

**MONDET**

Atty. Ref.: **2365-30**

Serial No. **Unknown**

Group:

Filed: **May 7, 2001**

Examiner:

For: **COSMETIC USE OF AT LEAST ONE  
POLYORGANOSILOXANE AS A GELLING AGENT AND  
COSMETIC COMPOSITION CONTAINING IT**

\* \* \* \* \*

**May 4, 2001**

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**PRELIMINARY AMENDMENT**

Preliminarily amend the above-identified application as follows.

**IN THE CLAIMS**

Amend the claims as follows:

1. (Amended) A method of gelling a cosmetic composition comprising adding to a cosmetic composition, as a gelling agent, at least one linear or cyclic polyorganosiloxane which comprises at least two organosiloxy units and at least two side groups or end groups, each of said groups being capable of forming at least one hydrogen bond with one or more partner groups, the said organosiloxy units being represented by the following formula:



in which:

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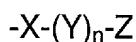
R represents a linear, branched or cyclic alkyl group, an aryl group, a polyether group or a fluoro group,

R' represents a group capable of forming at least one hydrogen bond,

a is 1, 2 or 3, and

b is 0 or 1, with the proviso that a+b is equal to 2 or 3, the said group R' being selected from the group consisting of:

- (a) a group derived from an unprotected or partially protected amino acid, and
- (b) a carboxylic acid, an amine or a phenol group of formula:



in which:

X represents a linear, branched or cyclic alkylene or alkenylene spacer chain, optionally comprising one or more hetero atoms in the chain,

Y represents a monocyclic or polycyclic divalent unsaturated hydrocarbon-based group or a divalent unsaturated heterocyclic group, said polycyclic or heterocyclic group optionally comprising up to 4 fused rings,

n represents an integer ranging from 1 to 4, and

Z represents a -COOH or -OH group or a primary, secondary or tertiary amine group, the nitrogen atom of which optionally forms part of a heterocyclic group Y.

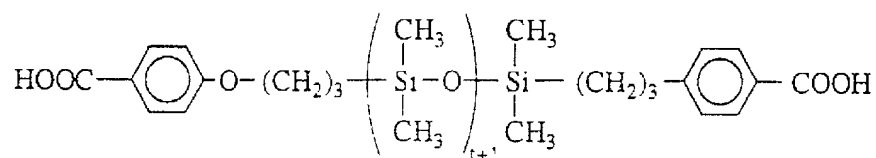
2. (Amended) A method according to Claim 1, wherein the polyorganosiloxane contains from 2 to 50,000 organosiloxy units.

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3. (Amended) A method according to Claim 1 wherein the side groups or end groups of the polyorganosiloxane are each capable of forming at least two hydrogen bonds with one or more partner groups.

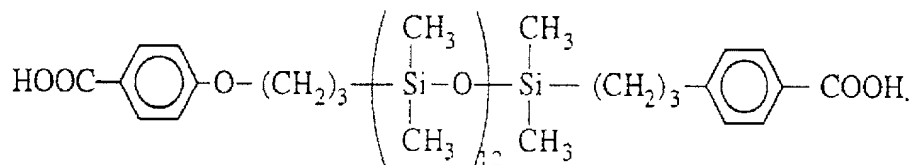
4. (Amended) A method according to Claim 1, wherein Y represents a 6-membered aromatic nucleus and Z represents a -COOH group.

5. (Amended) A method according to Claim 4, wherein the polyorganosiloxane corresponds to the following formula:



with t ranging from 1 to 1200.

6. (Amended) A method according to Claim 5, wherein the polyorganosiloxane corresponds to the following formula:



7. (Amended) A method according to Claim 1, wherein when Z represents an amino group, the nitrogen atom forms part of a heterocyclic group Y, and Y-Z represents a pyridyl group.

8. (Amended) Cosmetic composition comprising, in a cosmetically acceptable medium, at least one linear or cyclic polyorganosiloxane, which comprises at least two

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organosiloxy units and at least two side groups or end groups which are each capable of forming at least one hydrogen bond with one or more partner groups, the said organosiloxy units being represented by the following formula:



in which:

R represents a linear, branched or cyclic alkyl group, an aryl group, a polyether group or a fluoro group,

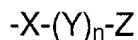
R' represents a group capable of forming at least one hydrogen bond,

a is 1, 2 or 3, and

b is 0 or 1, with the proviso that a+b is equal to 2 or 3,

the said group R' being selected from the group consisting of:

- (a) a group derived from an unprotected or a partially protected amino acid, and
- (b) a carboxylic acid, an amine or a phenol group of formula:



in which:

X represents a linear, branched or cyclic alkylene or alkenylene spacer chain, optionally comprising one or more hetero atoms in the chain,

Y represents a monocyclic or polycyclic divalent unsaturated hydrocarbon-based group or a divalent unsaturated heterocyclic group, said polycyclic or heterocyclic groups optionally comprising up to 4 fused rings,

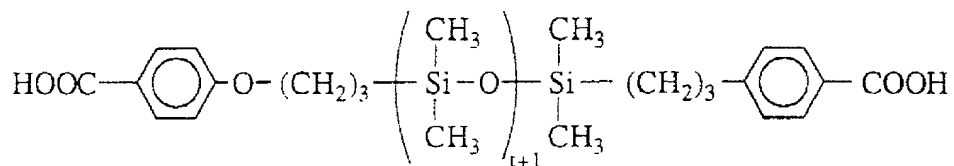
n represents an integer ranging from 1 to 4, and Z represents a -COOH or -OH group or a primary, secondary or tertiary amine group, the nitrogen atom of which optionally forms part of the heterocyclic group Y.

9. (Amended) Cosmetic composition according to Claim 8, wherein the polyorganosiloxane comprises from 2 to 50,000 organosiloxy units.

10. (Amended) Cosmetic composition according to Claim 8, wherein the side groups or end groups of the polyorganosiloxane are each capable of forming at least two hydrogen bonds with one or more partner groups.

11. (Amended) Cosmetic composition according to Claim 8, wherein Y represents a 6-membered aromatic nucleus and Z represents a -COOH group.

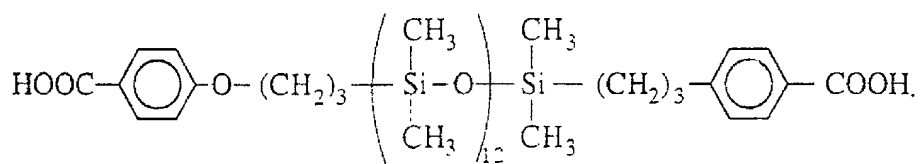
12. (Amended) Cosmetic composition according to Claim 11, wherein the polyorganosiloxane corresponds to the following formula:



with t ranging from 1 to 1200.

13. (Amended) Cosmetic composition according to Claim 12, wherein the polyorganosiloxane corresponds to the following formula:

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14. (Amended) Cosmetic composition according to Claim 8, wherein when Z represents an amino group, the nitrogen atom forms part of a heterocyclic group Y, and Y-Z represents a pyridyl group.

15. (Amended) Cosmetic composition according to Claim 8, wherein the amount of the polyorganosiloxane is between 0.5% and 50% by weight relative to the total weight of the cosmetic composition.

16. (Amended) Cosmetic composition according to Claim 15, wherein the amount of the polyorganosiloxane is between 1% and 30% by weight relative to the total weight of the cosmetic composition.

17. (Amended) Cosmetic composition according to Claim 8, wherein the cosmetically acceptable medium comprises a fatty phase, optionally organic solvents and optionally water.

18. (Amended) Cosmetic composition according to Claim 17, wherein the fatty phase comprises fatty substances that are liquid at room temperature and/or fatty substances that are solid at room temperature.

19. (Amended) Cosmetic composition according to Claim 18, wherein the fatty substances that are liquid at room temperature comprise at least one of a silicone oil and a hydrocarbon-based oil.

20. (Amended) Cosmetic composition according to Claim 19, comprising at least one silicone oil.

21. (Amended) Cosmetic composition according to Claim 20, wherein the silicone oil is selected from the group consisting of polydimethylsiloxanes (PDMSs), which are optionally phenylated; polymethylphenylsiloxanes, which are substituted with aliphatic and/or aromatic groups, or optionally fluorinated; polysiloxanes modified with fatty acids, fatty alcohols or polyoxyalkylenes; fluorosilicones and perfluorosilicone oils.

22. (Amended) Cosmetic composition according to Claim 19, wherein the hydrocarbon-based oil is selected from the group consisting of liquid paraffin, liquid petroleum jelly, mink oil, turtle oil, soybean oil, perhydrosqualene, sweet almond oil, beauty-leaf oil, palm oil, grape pip oil, sesame oil, corn oil, parleam oil, arara oil, rapeseed oil, sunflower oil, cottonseed oil, apricot oil, castor oil, avocado oil, jojoba oil, olive oil, cereal germ oil; an ester of linoleic acid, an ester of oleic acid, an ester of lauric acid, an ester of stearic acid a fatty ester, and a higher fatty alcohols containing at least 12 carbon atoms.

23. (Amended) Cosmetic composition according to Claim 18, wherein the fatty substances that are solid at room temperature comprise waxes, gums and/or pasty fatty substances.

24. (Amended) Cosmetic composition according to Claim 23, wherein the waxes are selected from the group consisting of waxes of animal origin, plant waxes, mineral waxes, synthetic waxes, waxes obtained by Fisher-Tropsch synthesis, silicone waxes and hydrogenated oils that are solid at 25°C.

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25. (Amended) Cosmetic composition according to Claim 23, wherein the gums are selected from the group consisting of high molecular weight polydimethylsiloxanes.

26. (Amended) Cosmetic composition according to Claim 23, wherein the pasty fatty substances are selected from the group consisting of hydrocarbon-based compounds and polydimethylsiloxanes.

27. (Amended) Cosmetic composition according to Claim 8, further comprising at least one additive selected from the group consisting of a filler, a pigment, a colorant, a surfactant, a sunscreen, an antioxidant, a fragrance and a preserving agent.

28. (Amended) Cosmetic composition according to Claim 8, wherein said composition is anhydrous.

29. (Amended) Cosmetic composition according to Claim 8, wherein said composition is in the form of a stick, a tube, a soft paste, with a dynamic viscosity at 25°C of about from 1 to 40 Pa.s, a dish, an oily gel or an oily liquid.

30. (Amended) A method of making up and/or caring for the skin, comprising applying a composition of claim 8 to said skin.

31. (Amended) Cosmetic composition according to Claim 8, in the form of a lipstick, a mascara, an eyeliner, a foundation, a powder, a blusher, an eyeshadow or a body make-up.

32. (Amended) Cosmetic composition according to Claim 8, in the form of a moisturizing product, a deodorant or an antiperspirant.

Add the following claims:



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--33. (new) A method according to Claim 2, wherein the polyorganosiloxane contains from 2 to 30,000 organosiloxy units.

34. (new) A cosmetic composition according to Claim 9, wherein the polyorganosiloxane contains from 2 to 30,000 organosiloxy units.

35. (new) A cosmetic composition of claim 21, wherein the silicone oil is selected from the group consisting of a phenyltrimethicone, a phenyltrimethylsiloxy-diphenylsiloxane, a diphenylmethyldimethyltrisiloxane, a diphenyldimethicone, and a phenyldimethicone.

36. (new) A cosmetic composition according to Claim 22, wherein said oil is selected from the group consisting of isopropyl myristate, isopropyl palmitate, butyl stearate, hexyl laurate, diisopropyl adipate, isononyl isononanoate, 2-ethylhexyl palmitate, 2-hexyldecyl laurate, 2-octyldecyl palmitate, 2-octyldodecyl myristate or lactate, bis(2-ethylhexyl) succinate, diisostearyl malate, glyceryl triisostearate, diglyceryl triisostearate, stearyl alcohol, oleyl alcohol, linoleyl alcohol, linolenyl alcohol, isostearyl alcohol and octyldodecano.

37. (new) A method of Claim 30, wherein said skin is selected from the group consisting of eyelids, lips and nails.--

**REMARKS**

Claims 1-37 are pending. The claims have been amended to place the claims in a more traditional format by, for example, eliminating improper multiple dependencies.

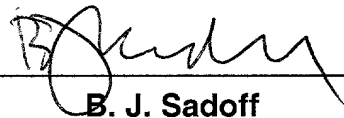
An early and favorable Action on the merits is requested.

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Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_



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**MARKED-UP CLAIMS**

1. (Amended) A method of gelling a cosmetic composition comprising adding to a cosmetic composition, [Cosmetic use,] as a gelling agent, [of] at least one linear or cyclic polyorganosiloxane which comprises at least two organosiloxy units and at least two side groups [and/or] or end groups, each of said groups being capable of forming at least one hydrogen bond with one or more partner groups, the said organosiloxy units being represented by the following formula:



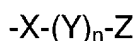
in which:

R represents a linear, branched or cyclic alkyl group, an aryl group, a polyether group or a fluoro group,

R' represents a group capable of forming at least one hydrogen bond,  
a is 1, 2 or 3, and

b is 0 or 1, with the proviso that a+b is equal to 2 or 3, the said group R' being selected [chosen] from the group consisting of:

- (a) [groups] a group derived from an unprotected or partially protected amino acid [acids], and
- (b) a carboxylic acid, an amine or a phenol [groups] group of formula:



in which:

X represents a linear, branched or cyclic alkylene or alkenylene spacer chain, [of alkylene or alkenylene type,] optionally comprising one or more hetero atoms in the chain,

Y represents a monocyclic or polycyclic divalent unsaturated hydrocarbon-based group or a divalent unsaturated heterocyclic group, [these] said polycyclic or heterocyclic [groups possibly] group optionally comprising up to 4 fused rings,

n represents an integer ranging from 1 to 4, and

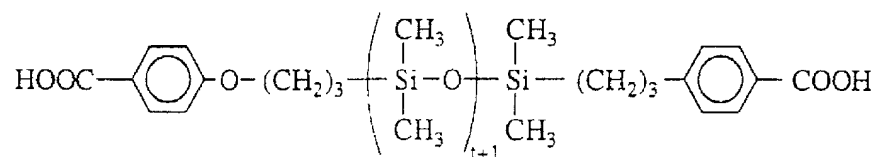
Z represents a -COOH or -OH group or a primary, secondary or tertiary amine group, the nitrogen atom of which optionally forms part of a heterocyclic group Y.

2. (Amended) A method [Cosmetic use] according to Claim 1, [characterized in that] wherein the polyorganosiloxane contains from 2 to 50,000 organosiloxy units [and preferably from 2 to 30,000 organosiloxy units].

3. (Amended) A method [Cosmetic use] according to Claim 1 [or 2, characterized in that] wherein the side [and/or] groups or end groups of the polyorganosiloxane are each capable of forming at least two hydrogen bonds with one or more partner groups.

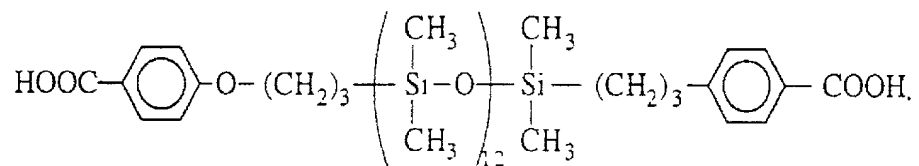
4. (Amended) A method according to Claim 1, wherein [Use in cosmetics according to any one of Claims 1 to 3, characterized in that] Y represents a 6-membered aromatic nucleus and Z represents a -COOH group.

5. (Amended) A method [Use in cosmetics] according to Claim 4, [characterized in that] wherein the polyorganosiloxane corresponds to the following formula:



with t ranging from 1 to 1200.

6. (Amended) A method [Use in cosmetics] according to Claim 5, [characterized in that] wherein the polyorganosiloxane corresponds to the following formula:



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7. (Amended) A method according [Use in cosmetics according] to [any one of Claims 1 to 3, characterized in that,] Claim 1, wherein when Z represents an amino group, the nitrogen atom forms part of a heterocyclic group Y, and Y-Z represents a pyridyl group.

8. (Amended) Cosmetic composition comprising, [characterized in that it comprises,] in a cosmetically acceptable medium, at least one linear or cyclic polyorganosiloxane, which comprises at least two organosiloxy units and at least two side groups or [and/or] end groups which are each capable of forming at least one hydrogen bond with one or more partner groups, the said organosiloxy units being represented by the following formula:



in which:

R represents a linear, branched or cyclic alkyl group, an aryl group, a polyether group or a fluoro group,

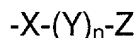
R' represents a group capable of forming at least one hydrogen bond,

a is 1, 2 or 3, and

b is 0 or 1, with the proviso that a+b is equal to 2 or 3,

the said group R' being [chosen from] selected from the group consisting of:

- (a) a group [groups] derived from an unprotected or a partially protected amino [acids] acid, and
- (b) a carboxylic acid, an amine or a phenol [groups] group of formula:



in which:

X represents a linear, branched or cyclic alkylene or alkenylene spacer chain, [of alkylene or alkenylene type,] optionally comprising one or more hetero atoms in the chain,

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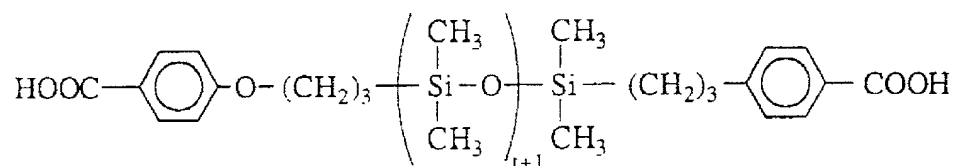
Y represents a monocyclic or polycyclic divalent unsaturated hydrocarbon-based group or a divalent unsaturated heterocyclic group, [these] said polycyclic or heterocyclic groups [possibly] optionally comprising up to 4 fused rings, n represents an integer ranging from 1 to 4, and Z represents a -COOH or -OH group or a primary, secondary or tertiary amine group, the nitrogen atom of which optionally forms part of the heterocyclic group Y.

9. (Amended) Cosmetic composition according to Claim 8, wherein [characterized in that] the polyorganosiloxane comprises from 2 to 50,000 organosiloxy units [and preferably from 2 to 30,000 organosiloxy units].

10. (Amended) Cosmetic composition according to Claim 8, [or 9, characterized in that] wherein the side [and/or] groups or end groups of the polyorganosiloxane are each capable of forming at least two hydrogen bonds with one or more partner groups.

11. (Amended) Cosmetic composition according to Claim 8, [any one of Claims 8 to 10, characterized in that] wherein Y represents a 6-membered aromatic nucleus and Z represents a -COOH group.

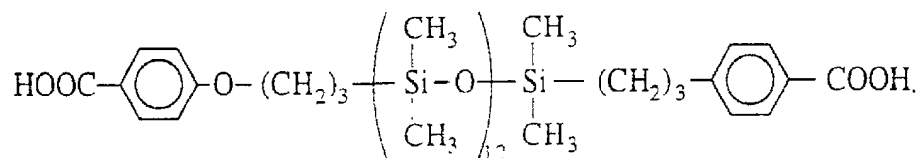
12. (Amended) Cosmetic composition according to Claim 11, [characterized in that] wherein the polyorganosiloxane corresponds to the following formula:



with t ranging from 1 to 1200.

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13. (Amended) Cosmetic composition according to Claim 12, [characterized in that] wherein the polyorganosiloxane corresponds to the following formula:



14. (Amended) Cosmetic composition according to [any one of Claims 8 to 10, characterized in that,] Claim 8, wherein when Z represents an amino group, the nitrogen atom forms part of a heterocyclic group Y, and Y-Z represents a pyridyl group.

15. (Amended) Cosmetic composition according to [any one of Claims 8 to 14, characterized in that] Claim 8, wherein the amount of the polyorganosiloxane is between 0.5% and 50% by weight relative to the total weight of the cosmetic composition.

16. (Amended) Cosmetic composition according to Claim 15, [characterized in that] wherein the amount of the polyorganosiloxane is between 1% and 30% by weight relative to the total weight of the cosmetic composition.

17. (Amended) Cosmetic composition according to [any one of Claims 8 to 16, characterized in that] Claim 8, wherein the cosmetically acceptable medium comprises a fatty phase, optionally organic solvents and optionally water.

18. (Amended) Cosmetic composition according to Claim 17, [characterized in that] wherein the fatty phase comprises fatty substances that are liquid at room temperature and/or fatty substances that are solid at room temperature.

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19. (Amended) Cosmetic composition according to Claim 18, [characterized in that] wherein the fatty substances that are liquid at room temperature comprise at least one of a silicone oil [and/or] and a hydrocarbon-based oil.

20. (Amended) Cosmetic composition according to Claim 19, [characterized in that it comprises] comprising at least one silicone oil.

21. (Amended) Cosmetic composition according to Claim 20, [characterized in that] wherein the silicone oil is [chosen] selected from the group consisting of polydimethylsiloxanes (PDMSs), [that] which are optionally phenylated[, such as phenyltrimethicones, phenyltrimethylsiloxydiphenylsiloxanes, diphenylmethyldimethyltrisiloxanes, diphenyldimethicones, phenyldimethicones,]; polymethylphenylsiloxanes, [optionally] which are substituted with aliphatic and/or aromatic groups, or optionally fluorinated; polysiloxanes modified with fatty acids, fatty alcohols or polyoxyalkylenes[.]; fluorosilicones and perfluorosilicone oils.

22. (Amended) Cosmetic composition according to Claim 19, [characterized in that] wherein the hydrocarbon-based oil is selected from the group consisting of [chosen from] liquid paraffin, liquid petroleum jelly, mink oil, turtle oil, soybean oil, perhydrosqualene, sweet almond oil, beauty-leaf oil, palm oil, grape pip oil, sesame oil, corn oil, parleam oil, arara oil, rapeseed oil, sunflower oil, cottonseed oil, apricot oil, castor oil, avocado oil, jojoba oil, olive oil, [or] cereal germ oil; [esters] an ester of linoleic acid, an ester of oleic acid, an ester of lauric acid, [or] an ester of stearic acid; fatty esters, such as isopropyl myristate, isopropyl palmitate, butyl stearate, hexyl laurate, diisopropyl adipate, isononyl isononanoate, 2-ethylhexyl palmitate, 2-hexyldecyl laurate, 2-octyldecyl palmitate, 2-octyldodecyl myristate or lactate, bis(2-ethylhexyl) succinate, diisostearyl malate, glyceryl triisostearate or diglyceryl triisostearate;] a fatty ester, and a higher fatty alcohols containing at least 12 carbon atoms[, such as stearyl



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alcohol, oleyl alcohol, linoleyl alcohol, linolenyl alcohol, isostearyl alcohol or octyldodecanol].

23. (Amended) Cosmetic composition according to Claim 18, [characterized in that] wherein the fatty substances that are solid at room temperature comprise waxes, gums and/or pasty fatty substances.

24. (Amended) Cosmetic composition according to Claim 23, [characterized in that] wherein the waxes are [chosen from] selected from the group consisting of waxes of animal origin, plant waxes, mineral waxes, synthetic waxes, [and the] waxes obtained by Fisher-Tropsch synthesis, [or alternatively] silicone waxes and hydrogenated oils that are solid at 25°C.

25. (Amended) Cosmetic composition according to Claim 23, [characterized in that] wherein the gums are [chosen from] selected from the group consisting of high molecular weight polydimethylsiloxanes.

26. (Amended) Cosmetic composition according to Claim 23, [characterized in that] wherein the pasty fatty substances are [chosen from] selected from the group consisting of hydrocarbon-based compounds and polydimethylsiloxanes.

27. (Amended) Cosmetic composition according to [any one of Claims 8 to 26, characterized in that it also comprises additives chosen from fillers, pigments, colourants, surfactants, sunscreens, antioxidants, fragrances and preserving agents] Claim 8, further comprising at least one additive selected from the group consisting of a filler, a pigment, a colorant, a surfactant, a sunscreen, an antioxidant, a fragrance and a preserving agent.

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28. (Amended) Cosmetic composition according to Claim 8, wherein said composition [any one of Claims 8 to 27, characterized in that it] is anhydrous.

29. (Amended) Cosmetic composition according to [any one of Claims 8 to 28, characterized in that it is] Claim 8, wherein said composition is in the form of a stick, [or] a tube, [in the form of] a soft paste, with a dynamic viscosity at 25°C of about from 1 to 40 Pa.s, [or in the form of] a dish, an oily gel or an oily liquid.

30. (Amended) A method of [Cosmetic composition according to any one of Claims 8 to 29, characterized in that it is used for] making up and/or caring for the skin, [including the skin of the eyelids, and also the lips and superficial body growths] comprising applying a composition of claim 8 to said skin.

31. (Amended) Cosmetic composition according to [any one of Claims 8 to 30, characterized in that it is] Claim 8, in the form of a lipstick, a mascara, an eyeliner, a foundation, a powder, a blusher, an eyeshadow or a body make-up.

32. (Amended) Cosmetic composition according to [any one of Claims 8 to 30, characterized in that it is] Claim 8, in the form of a moisturizing product, a deodorant or an antiperspirant.